

WHAT IS CLAIMED IS:

1. A method for modulating angiogenesis comprising the step of:

specifically modulating the activity of Kuz in a vertebrate animal predetermined to have a pathogenic angiogenesis, whereby the angiogenesis is modulated.

2. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically binds the Kuz.

3. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically binds the Kuz, wherein the agent comprises a metalloprotease inhibitor.

4. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically binds the Kuz, wherein the agent comprises a metalloprotease inhibitor, wherein the inhibitor is selected from the group consisting of substituted hydroxamates, carboxylates, thiols, phosphonates, aminodiathiazols, and catechols which inhibit said Kuz through high-affinity zinc binding.

5. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically binds the Kuz, wherein the agent comprises a metalloprotease inhibitor, wherein the inhibitor is a TACE (TNF-alpha converting enzyme) inhibitor.

6. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically binds the Kuz, wherein the agent comprises a metalloprotease inhibitor, wherein the inhibitor is selected from the group consisting of IC-3 (N-{D,L-[2-(hydroxyaminocaronyl)methyl]-4-methyl-pentanoyl}-L-alanine, 2-aminoethyl amide), GM6001 (NHOHCOCH<sub>2</sub>CH(I-Bu)CO-Trp-NHMe); GW9471 (Moss et al, Nature, 1997, Vol 385, 733-736) and BB-94 (batimastat).

7. A method according to claim 1, wherein the modulating step comprises contacting the

animal with an agent which specifically binds the Kuz, wherein the agent comprises a Kuz-specific antibody.

8. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically competes with Kuz for a substrate or cofactor.

9. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically competes with Kuz for a substrate or cofactor, wherein the agent comprises a dominant negative Kuz mutant.

10. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically competes with Kuz for a substrate or cofactor, wherein the agent comprises a soluble dominant negative Kuz mutant.

11. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically competes with Kuz for a substrate or cofactor, wherein the agent comprises a soluble dominant negative Kuz mutant fused to an immunoglobulin Fc region.

12. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically competes with Kuz for a substrate or cofactor, wherein the agent comprises a chelator of divalent cations.

13. A method according to claim 1, wherein the modulating step comprises contacting the animal with an agent which specifically competes with Kuz for a substrate or cofactor, wherein the agent comprises a chelator of divalent cations selected from the group consisting of EDTA and 1,10-phenanthroline.

14. A method for detecting kuz activity, comprising the step of:  
specifically detecting Kuz activity in a vertebrate animal predetermined to have a pathogenic angiogenesis.

15. A method according to claim 14, wherein the detecting step comprises use of a KUZ specific protease assay or a KUZ specific immunobinding assay.

16. A method for detecting angiogenesis, comprising the step of:

5           specifically detecting a pathogenic angiogenesis in a vertebrate animal having a predetermined Kuz activity.

17. A method according to claim 16, wherein the detecting step comprises detecting a tumor.